Ounces and Pounds...

ACAHO Member Investments To Address Infectious Diseases and Emergency Preparedness

June 2006

Association of Canadian Academic Healthcare Organizations
Association Canadienne des Institutions de Santé Universitaires

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WHO WE ARE…

The Association of Canadian Academic Healthcare Organizations (ACAHO) is a member-based association that represents more than 40 teaching centres - which are a combination of Teaching Hospitals, and Regional Health Authorities and their Research Institutes. Members range from single hospital organizations to multi-site, multi-dimensional regional facilities. The distinguishing characteristic of the members of ACAHO is that they have overall responsibility for the following integrated activities:

- Providing Canadians with timely access to quality specialized and some primary health care services.
- They represent all of the principal teaching sites for Canada's health care professionals. This includes all sixteen faculties of medicine (physicians), and other faculties of health (nursing, pharmacy and dentistry), and many colleges with technical and professionals in health including rehabilitation therapists, laboratory technicians, respiratory therapists, and speech therapists.
- They provide the large majority of infrastructure to support and conduct health research in its dimensions - medical discovery, knowledge creation, innovation and commercialization.

OUR MISSION…

The mission of ACAHO is to provide effective national leadership, advocacy and policy representation in the three separate, but related, areas of:

- The funding, organization, management and delivery of highly specialized tertiary and quaternary, as well as primary health care services.
- The education and training of the next generation of Canada's health care professionals, and
- Providing the necessary infrastructure to support and conduct basic and applied health research, medical discovery and innovation.

For more information on the activities of the Association, please visit our web-site at www.Acaho.org.

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ACAHO MEMBER INVESTMENTS TO ADDRESS INFECTIOUS DISEASES AND EMERGENCY PREPAREDNESS

An ACAHO Member Survey
June 2006

ACKNOWLEDGEMENTS

This report was prepared by Emily C. Gruenwoldt (Senior Advisor, Research and Policy Development, ACAHO) and Glenn G. Brimacombe (Chief Executive Officer, ACAHO).

The Association of Canadian Academic Healthcare Organizations would like to acknowledge the following members for their participation in this report: The Vancouver Coastal Health Authority, the Provincial Health Services Authority and The BC Centre for Disease Control, Capital Health Authority (Edmonton), Saskatoon Health Region, London Health Sciences Centre, St. Joseph's Healthcare (Hamilton), Sunnybrook & Women's College Health Sciences Centre, University Health Network, SCO Health Service, Children's Hospital of Eastern Ontario, Capital District Health Authority (Halifax), IWK Health Centre, and the Eastern Regional Integrated Health Authority.

Special thanks to Dr. Isra Levy (Canadian Medical Association), Ms. Seema Nagpal (Canadian Medical Association), Dr. Elinor Wilson (Canadian Public Health Association) and Ms. Karen Hill (Canadian Public Health Association) for their review and feedback in the preparation of this report.

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PREFACE

Unlike the acute care sector where the majority of care is delivered within the borders of community, tertiary or quaternary health centres, public health is practiced "on the ground" in schools, in Canadians homes, in the workplace and other local environments. Unbeknownst to many, the public health continuum extends far beyond flu shots and vaccines. Public health relates to the health of entire populations, from health promotion to health protection, disease and injury prevention, health assessment and surveillance. A strong and vibrant public health system can play an important role in contributing to a sustainable health system. By preventing (or postponing) illness, injury and disease which would otherwise be treated in acute care settings, direct and indirect costs of health care are otherwise deferred, if not reduced altogether**.**

Given the need to tighten the relationship between public health and the "health system", the Association of Canadian Academic Healthcare Organizations (ACAHO) felt it was important to identify how members, which include Teaching Hospitals, Regional Health Authorities and their Research Institutes, are investing in public health initiatives, specifically with respect to infectious diseases and emergency preparedness.

The report is timely given the national focus that the federal government has placed on public health over the past three years—particularly with the creation of a Public Health Agency of Canada (PHAC) followed by a series of initial investments intended to build capacity to anticipate and respond to the public health needs of the country.

As we move forward, members of ACAHO are playing an important role in developing the country's public health capacity—in terms of infection control, emergency preparedness and beyond—working in collaboration with federal, provincial and municipal governments, provider communities and the general public.

To be clear, the report is only a reflection of the range of activities that members of the Association have implemented - or are considering to implement, that impact on the public health agenda in their respective jurisdictions. While provincial governments have introduced a number of complementary initiatives to address public health (e.g., clean water programs**,** safer roads, smoking bans, etc.), they are beyond the purview of this report.

Notwithstanding the recent policy discussions and activities – both federally and provincially – our view is that the dialogue on public health has only just begun. It is our hope that this summary report will give the reader a clearer sense of the role that Canada's Teaching Hospitals and Regional Health Authorities who have overall responsibility for the academic mission (i.e., service provision, teaching & education, and research & innovation) are taking to develop and introduce a range of new and progressive public health initiatives across the country.

A MESSAGE FROM THE PRESIDENT OF ACAHO

When we think about the future of the health system in Canada, often our focus is on the role of providers and institutions and their responsibilities in providing Canadians with timely access to a range of quality health services. While few would argue that the national policy dialogue around access and quality is necessary and vital, one area that has not received a significant amount of attention – until recently – is the role of public health and its relationship to our traditional definition of the health system.

While Canadians clearly hold the acute care health system in high regard, there is a growing recognition that additional public resources targeted towards disease prevention and health promotion activities are required. At the same time, these investments should not displace those which are necessary to secure access to quality health services on a timely basis; rather, new money focused on "upstream" activities such as disease prevention and health promotion as well as pandemic and emergency preparedness planning is essential in order for Canadians to live longer, healthier and more productive lives—and improve their quality of life.

Since 2004, the federal government has taken a leadership role and has introduced a number of significant public health measures. As important as they are, we need to ensure that there is a "meshing" in the way we think about public health from a national point of view, and what it means for those who are "on the ground". In short, as much as we think about public health, specifically infection control and emergency preparedness in a *national context*, we need to ensure that we have the resources and processes in place to act, as well as react, at the *local* level.

In today's global village, the threat and potential impact of tomorrow's pandemic is more pronounced and its consequences all the more real. As a result, we need to give careful strategic thought to ensure that we are, in fact, building the right mechanisms to exchange information as well as investing in our public health research and program capacity. This report, through the activities of ACAHO members, is intended to further this very dialogue.

Finally, in seeking a national consensus on how we should move forward in this area, ACAHO is a member of the Canadian Coalition on Public Health in the 21st Century. For more information on the activities of the Coalition, please visit www.cpha.ca/coalition/.

In closing, we would welcome your comments on the content of this report. In this regard, feel free to contact Ms. Emily Gruenwoldt at (613) 730-5818 extension 324, or via e-mail at gruenwoldt@acaho.org.

For more information on the activities of the Association, I would invite you to visit our web-site at www.acaho.org.

Sincerely yours,

Ms. Lynda Cranston
President, ACAHO

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EXECUTIVE SUMMARY

Canadians strongly support initiatives to improve health and prevent disease and injury.

For the most part, when Canadians think about the future of health and health care in Canada, it is usually in the context of *accessing* quality health services on a *timely* basis. Notwithstanding the need to continue to look for new and innovative ways in which to manage and deliver care that meets the changing health needs of Canadians, there is also a growing recognition that we need to invest additional resources in a range of public health activities such as health promotion, health protection, disease and injury prevention, health assessment and surveillance, including pandemic planning, and emergency preparedness.

As much as members of the Association of Canadian Academic Healthcare Organizations (ACAHO) focus on the care delivery process – along with its training & education, and health research missions – there is an increasing convergence on the symbiotic relationship between *upstream* investments in public health initiatives and their *downstream* linkages to the formal health care system.

The purpose of this report is to take stock of member's activities with respect to a broad range of public health initiatives.

Given the recent experience of SARS, and what might come in the future, members of ACAHO, working with governments, providers and the public, have been active on a number of fronts to accelerate public health capacity-building. Most recently, the 2006 Federal Budget announced $1 billion over five years to improve Canada's capacity to prepare for a pandemic. $600 million is to be allocated to departments and agencies, and $400 million is to be set aside as a contingency, on an as-needed basis.

Members of ACAHO are actively pursuing a number of public health initiatives, many of which include cutting edge research and the development of innovative public health networks. These measures are intended to improve the responsiveness and effectiveness of the health system in general – with Canadians being the ultimate beneficiary. At the same time, the explicit processes and programs which have been developed to improve public health across the country serve to improve the transparency of decision-making processes in times of crisis, and clarify many of the accountability relationships when it comes to public health emergency planning.

In recent years, national reports on the state of health care in Canada have recommended strengthening public health prevention and promotion programs, as well as providing additional funding to support public health infrastructure. This chapter identifies how members are developing additional public health capacity, from physical infrastructure to human resources.

The purpose of this report is to take stock of members' activities in public health—with a specific focus on infectious diseases and emergency preparedness. While the role of Academic Hospitals with regards to public health reaches far beyond infection control and emergency preparedness, this report largely reflects member responses to a survey conducted on these themes specifically.

The report is structured into five inter-locking themes: First, this survey will consider *public health capacity* broadly, both in reference to building physical infrastructure as well as increasing human capital. Second, ACAHO members were asked to identify *new research projects* underway which have a particular focus on infectious diseases and emergency preparedness. Thirdly, this report reflects on *new public health initiatives* underway in Canada's teaching hospitals. The fourth theme looks at the evolution of *public health networks*—how they have changed post-SARS, who the players are (in terms of the ACAHO members involved), and what the goals/outcomes of networks are. Lastly, this report will focus on the *Health Goals for Canada*, recognizing those ACAHO members who have been actively involved in round table discussions leading to the identification of an overarching goal and nine specific health goals for Canada.

PUBLIC HEALTH CAPACITY

Research is essential to the development of effective response measures and ultimate control of public health epidemics.

In June 2001, a Federal-Provincial-Territorial report on Public Health Capacity was prepared at the request of the Conference of Deputy Ministers of Health. The report highlighted weaknesses in public health infrastructure across Canada. Disparities in capacity from one province to the next were noted; concerns about the relatively low priority given to longer term diseases and injury prevention strategies, weaknesses in human resources for public health, and growing recruitment/retention difficulties were observed.

In 2002, the Romanow Commission recommended a national immunization strategy, a physical activity strategy, and strengthening prevention programs. Later that same year, the Standing Senate Committee on Social Affairs, Science and Technology pronounced on government to commit $125 million annually towards chronic disease prevention. Further, an additional $200 million annually was recommended to enhance public health infrastructure in Canada.

This chapter identifies how members are developing additional public health capacity, from physical infrastructure to human resources. Some members of ACAHO are active faculty members of their affiliated Universities, contributing to course lectures and providing problem-based learning opportunities for students from a variety of health disciplines, while many others are investing in new infection control programs as well as human resource capacity such as infection control practitioners.

PUBLIC HEALTH RESEARCH

From infection control to emergency preparedness, ACAHO members have invested both time and money to ramp up public health programs in their institutions or Regional Health Authorities.

Research is the oxygen of an evidence-based health system, and as such, is essential to the development of effective response measures and ultimate control of public health epidemics. Unfortunately, with few notable exceptions, Canadian governments and public health institutions have not built the necessary research capacity for both emerging infectious and long-term chronic diseases. Research and evaluative capacity in public health more generally was not sustained during the budget roll-backs of the 1990s, as deficit-cutting reductions limited federal transfers.[i]

While research funding has significantly increased across Canada in recent years, investments have favoured investigator-initiated fundamental research or R&D activities that are amenable to short-term economic pay-offs through private partnerships. The National Advisory Committee on SARS and Public Health (The Naylor Report) strongly supported “on-going and greater investments in ‘curiosity-driven’ research.”

ACAHO asked members to identify new research projects underway which have a particular focus on public health. Research projects concerning the control and elimination of sexually transmitted infections including HIV/AIDS, border air quality, tobacco control, foreign animal disease outbreaks, on-line infection control training modules and health disparities are only a few examples of work ongoing in ACAHO member institutions.

NEW PUBLIC HEALTH INITIATIVES

From Coast to Coast, ACAHO members have responded to the Naylor Committee's recommendations. Many new and innovative public health initiatives originate in teaching hospitals and Regional Health Authorities across the country. From infection control to emergency preparedness, ACAHO members have invested both time and financial resources to ramp up public health programs.

Infection control initiatives were among the first to be reviewed in healthcare institutions across the country, in light of the SARS outbreak. Infection control programs in hospitals function as a parallel system to public health efforts in the community. According to the Canadian Hospital Epidemiology Committee, systematic problems in our current health care system include "insufficient time devoted to learning infection control practices for all health care providers" and "little, if any, monitoring of infection control practices and few consequences for non-compliance".

The SARS outbreak also clearly demonstrated that more needs to be done to integrate the public health and emergency response systems in times of crisis. Based on information provided by ACAHO members, it appears that federal-provincial-territorial collaboration in emergency preparedness and response is more advanced than in health surveillance and outbreak management.

This section describes how ACAHO members are reviewing existing infection control practices, developing new infection control programs and working to train new infection control staff. A number of members are also active on emergency response support committees.

BUILDING PUBLIC HEALTH NETWORKS

ACAHO members are actively participating in the creation and management of a variety of public health networks across the country.

In 2004, the Working Group "A Public Health Agency for Canada" recognized the merit in establishing a Pan-Canadian Public Health Network which would knit together both infectious and chronic disease networks, as well as other intergovernmental processes discussed in the Naylor Report. Improved system practices would develop, as well as a series of formal agreements that would specify the rules of engagement on specific public health issues.

Networks come in many shapes and sizes, with mandates that vary from collaboration and coordination to oversight and joint policy development. The public health networks which have been established by members of ACAHO focus on all of the above, in addition to:

- Identifying consensus based priorities;
- Defining and clarifying jurisdictional roles and responsibilities with respect to public health;
- Reducing duplication between and among jurisdictions;
- Overseeing a process for developing, approving and implementing common standards, guidelines and sharing of best practices;
- Promoting and overseeing a process of applied research and its translation into policies, programs and practice; and

- Seeking to build new cooperative and collaborative mechanisms and approaches to public health matters.

ACAHO members are actively participating in the creation and management of a variety of public health networks across the country including Provincial Infection Control Networks, scientific networks, and environmental and occupational health research networks.

HEALTH GOALS OF CANADA

Two thirds of ACAHO members surveyed were familiar with the "Health Goals for Canada" initiative.

In the context of accelerating work on a pan-Canadian Public Health Strategy, in September 2004, the First Ministers committed to "improving the health status of Canadians through a collaborative process." First Ministers directed Provincial Ministers of Health to take the lead on developing health goals for Canada. Federal Minister Carolyn Bennett, Minister of State (Public Health), and Manitoba Minister Theresa Oswald, Minister Responsible for Health Living were chosen to lead this process.

In many tangible ways, members of ACAHO from coast to coast have developed and implemented a series of public health measures which will serve to improve the responsiveness and effectiveness of the health system in general—with Canadians being the ultimate beneficiary.

Understanding that improving the health of Canadians will require the participation and collaboration of individuals, groups, organizations and employers, the consultation phase of the goals initiative included roundtables with public health stakeholders, experts and ordinary citizens in each province and territory so that Canadians could chare their concerns, priorities and visions for a health Canada. Shortly after the roundtables concluded, an overarching goal and nine health goals were drafted.[ii]

Two thirds of ACAHO members surveyed were familiar with the "Health Goals for Canada" initiative. This chapter reveals how individual institutions and Regional Health Authorities have participated in the process to develop the goals as well as adopt priorities which are congruent with the Health Goals.

In many tangible ways, members of ACAHO from coast to coast have developed and implemented a series of public health measures which will serve to improve the responsiveness and effectiveness of the health system in general—with Canadians being the ultimate beneficiary. At the same time, the explicit processes and programs which have been developed to improve infection control and emergency preparedness across the country serve to improve the transparency of decision making processes in times of crisis, and clarify many of the accountability relationships when it comes to public health emergency planning.

While there is no doubt that significant progress has been achieved in the short time since the Naylor Report, there is clearly more work that needs to be done in this area. Given their role in the health system, Teaching Hospitals and Regional Health Authorities look forward to contributing to a responsive public health system.

OUNCES AND POUNDS…
ACAHO MEMBER INVESTMENTS TO ADDRESS INFECTIOUS DISEASES AND EMERGENCY PREPAREDNESS

PURPOSE

Many of the recommendations of the National Advisory Committee on SARS and Public Health have been adopted, and as a result, there now exists a Public Health Agency of Canada and a Chief Public Health Officer, giving public health a visible "face", structure and overall focus .

In November 2005, the Minister of State for Public Health, The Honourable Carolyn Bennett convened a multi-stakeholder meeting to discuss progress made to-date by a number of constituencies in health system on the recommendations from the Report of the National Advisory Committee on SARS and Public Health (the Naylor Report).[iii]

At this meeting, ACAHO provided an overview of the series of activities of its members. Given the considerable interest in the presentation of the Association, it was decided to develop a more formal document which captures the findings of the member survey, and showcases the successes of the Teaching Hospitals and Regional Health Authorities, specifically with respect to infection control and emergency preparedness functions.

The following ACAHO members completed the survey, administered in Fall 2005:

- **The Vancouver Coastal Health Authority**
- **The Provincial Health Services Authority (British Columbia)**
- **The BC Centre for Disease Control**
- **Capital Health (Edmonton)**
- **Saskatoon Health Region**
- **London Health Sciences Centre**
- **St. Joseph's Healthcare (Hamilton)**
- **Sunnybrook & Women's College Health Sciences Centre**
- **University Health Network**
- **SCO Health Service (Ottawa)**
- **Children's Hospital of Eastern Ontario (Ottawa)**
- **Capital District Health Authority (Halifax)**
- **IWK Health Centre (Halifax)**
- **Eastern Regional Integrated Health Authority (Newfoundland)**

NATIONAL POLICY CONTEXT

In their submission to the House of Commons Standing Committee on Finance, the Canadian Public Health Association (CPHA) recognized some of the progress that has been made to strengthen Canada's public health system since the SARS outbreak in 2004. Many of the recommendations emanating from the National Advisory Committee on SARS and Public Health (The Naylor Committee) have been adopted, and as a result, there now exists a Public Health Agency of Canada (PHAC) and a Chief Public Health Officer, giving public health a visible "face", structure and overall focus. The government in power at the time (the Federal Liberal Party), further named a Minister of State, Public Health[iv], and in the 2004 Federal Budget, committed $665 million over three years to national public health functions. This is in addition to the existing $400 million that was transferred from Health Canada to the new agency.[v]

While the initial financial investments are viewed an important first step, there remains a gap between the Naylor Committee's recommendations and the response of the Federal Government.

While the initial financial investments are viewed an important first step, there remains a gap between the Naylor Committee's recommendations and the response of the Federal Government. Specifically, The Naylor Committee recommended 5% of total health spending (public and private) be directed towards public health. In 2005, where total health spending in Canada is estimated to reach $142 billion, 5% of this total would suggest $7.1 billion should be dedicated to public health initiatives.

Currently, there remains some uncertainty with respect to total spending on public health. For example, the Canadian Institute for Health Information reports that public health spending in 2005 was $7.8 billion.[vi] In this case, public health spending is reported by the provincial governments, however, the figure is largely a residual calculation and therefore largely unconfirmed.

Alternatively, the Canadian Public Health Association estimates that total spending on public health comprises 2% (or $2.84 billion in 2005) of total health spending (public and private). Clearly, a standard approach to data collection and reporting is needed in order to accurately capture public health spending in Canada.

Most recently, the 2006 Federal Budget announced $1 billion over five years to improve Canada's capacity to prepare for a pandemic. $600 million is to be allocated to departments and agencies, and $400 million is to be set aside as a contingency, on an as-needed basis.[vii] Prior to this latest announcement, the federal government provided approximately $500 million annually to fund activities associated with the Public Health Agency of Canada. As a result of the 2006 budget, PHAC funding will increase to $573 million[viii]. Dr. Naylor recommended an additional $700 million of funding annually for public health infrastructure and programming in four related areas (see Figure 1):[ix]

Figure 1: Recommendations of the National Advisory Committee on SARS & Public Health

New Funding for Public Health	$
The Government of Canada should budget for increases in core functions of Public Health Agency of Canada beyond that already spent on core federal public health functions.	$200 million per annum
The Government of Canada should fund a new Public Health Partnerships Program under the auspices of Public Health Agency of Canada.	$300 million per annum
Through the Public Health Agency of Canada, the Government of Canada should invest funds to establish a National Immunization Strategy.	$100 million per annum
Under the aegis of the Public Health Agency of Canada, the Government of Canada should budget for a Communicable Disease Control Fund.	$100 million per annum
Total	**$700 million per annum**

The Canadian Coalition for Public Health in the 21st Century - of which ACAHO is a member - observes that Naylor's original estimate did not include other vital public health functions, such as surveillance and control of non-communicable diseases, and support for the Pan-Canadian Public Health Network to build capacity and provide coordinated responses to public health emergencies nationwide.

Following the Naylor report, the federal government tasked Canada Health Infoway with facilitating the development of surveillance solutions in partnership with the

Health policy experts have estimated that meeting the Naylor Gap…would require an additional investment of $600 million annually.

The early financial commitment of the federal government underscores the importance that ACAHO and others place on investments in health promotion and prevention, and increasingly healthy lifestyle choices.

provinces and territories. A short time later (2005), Canada Health Infoway announced a $100 million investment targeted towards the enhancement of pan-Canadian public health surveillance. The purpose is to help public health professionals better detect and respond to outbreaks of communicable diseases, such as SARS.

Health policy experts have estimated that meeting the Naylor Gap (the gap between the Naylor Advisory Committee's recommendations to government during the SARS outbreak and the government's actions in meeting those recommendations) would require an additional investment of $600 million annually. The 2006 Federal Budget committed $120 million annually for the next five years. Addressing the Naylor Gap would bring PHAC funding to $1.1 billion per year.

The early financial commitment of the federal government underscores the importance that ACAHO and others place on investments in health promotion and prevention, and increasingly healthy lifestyle choices. That said, these "upstream" investments should not be viewed as displacing needed resources when it comes to accessing necessary health services. In the view of ACAHO, a balance between both is required; a strong public health system is vital to an effective health care system.

In light of these investments, this report highlights ACAHO member activities in public health—with a specific focus on infectious diseases and emergency preparedness. From investments in infection control programs to the creation of public health networks, Canada's Teaching Hospitals, Regional Health Authorities and affiliated Research Institutes have been an active supporter of a vibrant national public health system.

PUBLIC HEALTH CAPACITY

In June 2001, a Federal-Provincial-Territorial report on public health capacity was prepared at the request of the Conference of Deputy Ministers of Health. The report highlighted weaknesses in public health infrastructure across Canada.

In June 2001, a Federal-Provincial-Territorial report on Public Health Capacity was prepared at the request of the F/P/T Conference of Deputy Ministers of Health.[x] The authors of the report, a special "Task Force on Public Health", proposed four key measures including a Pan-Canadian Public Health Network, collaborative public health strategies, principles to support an approach for an agreement for mutual aid during an emergency, and finally, rationalization to bring order to existing F/P/T bodies dealing with public health.

The report also highlighted weaknesses in public health infrastructure across Canada, where infrastructure referred to public health human resources, organizational capacity, as well as information and knowledge systems. Disparities in capacity from one province to the next were observed; concerns about the relatively low priority given to longer term diseases and injury prevention strategies, weaknesses in human resources for public health, and growing recruitment/retention difficulties were also noted.

ACAHO asked members what specifically they were doing to develop additional training/public health human resource capacity. Results from this survey reveal that there is indeed varying public health capacity from one province to the next. Where some provinces have devoted considerable resources (both time and money) to strengthening public health initiatives, others are coming on board only recently.

In 2002, the Romanow Commission recommended a national immunization strategy, a physical activity strategy, and strengthening prevention programs.[xi] Later that same year, the Standing Senate Committee on Social Affairs, Science and Technology pronounced on government to commit $125 million annually towards chronic disease prevention. Further, an additional $200 million annually was recommended to enhance public health infrastructure in Canada.[xii]

The BC Centre for Disease Control, as a result of numerous ongoing initiatives in the public health domain, considers themselves a "Public Health Teaching Hospital."

The National Advisory Committee on SARS and Public Health recommended four strategies to renew human resources for public health. These recommendations included: (1) Engaging provincial/territorial departments and ministries of health in immediate discussions around the initiation of a national strategy for the renewal of human resources in public health; (2) Exploring opportunities to create and support training positions and programs in various public health-related fields; (3) Creating a National Public Health Service with a variety of career paths and opportunities for Canadians interested in public health including secondments to and from provincial/territorial and local health agencies; and (4) The development of contingency plans to limit the adverse impact on students and trainees of teaching hospitals in the event of an infectious disease outbreak.

In this national policy context, ACAHO asked members what they were specifically doing to develop additional training capacity and public health human resource capacity.

In British Columbia, prior to SARS, the **BC Centre for Disease Control (BCCDC)** continues to support the education of health professionals in public health. The Centres' strategic plan identifies specific goals for the training of health professionals.

Accordingly, the **BCCDC** has designed a University-level course focused on providing infection control practitioners with information about epidemiology and public health. Many **BCCDC** staff are faculty members at the University of British Columbia and contribute courses, lectures, and problem-based learning opportunities for students from a variety of health disciplines. The Centre takes on graduate students, residents, field epidemiology trainees and others for practical training. As a result, the **BCCDC** considers them selves a "Public Health Teaching Hospital".

In terms of on-the-ground training, the **BCCDC** remains a training site and supervisor of physicians who specialize in Community Medicine, Infectious Diseases, Medical Microbiology and Family Medicine. The Centre offers training to BC public health nurses in areas related to sexually transmitted diseases and HIV/AIDS, as well as a few other communicable diseases. This program has evolved significantly in the past few years, and will begin using e-learning to ensure these skills are available to nurses in all jurisdictions in the province, particularly those in rural and remote regions. **BCCDC** also supports the research work of Masters and PhD students in Public Health and Epidemiology.

Vancouver Coastal Health has recently invested $1 million in new Infection Control Staff for the Region. In particular, a great deal of time has been spent preparing staff to mitigate an influenza outbreak.

Capital Health (Edmonton) has developed a human resource contingency/response plan in the event of a disaster or pandemic.

BCCDC continues to pursue the creation of a School of Public Health and to enhance training of healthcare physicians in public health and community medicine as well as allied healthcare personnel. The Centre is currently a training site in Environmental Health for the University of British Columbia Medicine Residency Program. As well, **BCCDC** is a training site for Family Physicians doing enhanced skills training in Environmental Health. **BC Centre for Disease Control** staff are active in delivering an on campus course in Environmental Health at the graduate level and participate in thesis supervision at Master's and Doctoral levels. Policy relevant projects originating at the Centre often involve graduate students and provide opportunity for real world applications of knowledge gained on campus.

Vancouver Coastal Health Authority has recently invested $1 million in new Infection Control staff for the Region. In particular, a great deal of time has been spent preparing staff in all facilities in regards to mitigating an influenza outbreak. **Capital Health (Edmonton)** has developed a human resource contingency/response plan in the event of a disaster or pandemic. **Capital Health (Edmonton)** supports human capacity development insofar as they provide faculty to Concordia University (Edmonton) for degree programs training Environmental Health Officers. As well, in partnership with the University of Alberta, **Capital Health (Edmonton)** has established a new Royal College residency program in community medicine for training public health physicians.

The **Saskatoon Health Region** is working collaboratively with the University of Saskatchewan in the development of a new Masters of Public Health program. It is set to admit students in the Fall of 2006.

In Ontario, a number of capacity building initiatives are underway. At the **London Health Sciences Centre**, 1.5 full-time equivalents (FTE) infection control practitioners (ICPs) were added to the city-wide Infection Control Program in January 2005 for Febrile Respiratory Illness surveillance bringing the total number of ICPs to 10.1 FTEs for 1,023 acute care beds and 1,438 non-acute care beds. Infection Control Practitioners attend educational sessions when time and resources allow; a total of four ICPs (city-wide) became certified in Infection Control in 2004. Most notably, a

fourteen bed Controlled Infectious Diseases Unit opened at the Victoria campus this year which offers isolation for outbreaks of airborne infection within the region.

At **St. Joseph's Healthcare (Hamilton)** issues of capacity are largely dealt with through the Regional Outbreak Committee. The Clinical Health Services portion of the Pandemic Influenza Plan is being developed by two Project Managers who have recently been hired.

SCO Health Services has recently hired a second infection control staff member and are working towards a hospital wide infection control program. At the **Children's Hospital of Eastern Ontario (CHEO)** the number of infectious disease and infection control staff has increased. At the same time, **CHEO** is collaborating with the Ontario Hospital Association and other provincial stakeholders on province-wide initiatives for pandemic planning.

On the East Coast, both the **IWK and Capital District Health Authority (Halifax)** visited with Minister Carolyn Bennett with respect to increasing the number of staff who are trained to deal with public health issues, including pandemic planning. The **Eastern Regional Integrated Health Authority** in St. John's has received funding from the Department of Health and Community Services for the administration of vaccines approved for children (pneumococcal, varicella and meningococcal vaccines) and for influenza immunization. 4 FTEs were retained by **Eastern Regional Integrated Health Authority** for this project.

Figure 2 summarizes ACAHO members' participation working to increase public health capacity.

Figure 2: ACAHO Members Working to Increase Public Health Capacity[xiii]

ACAHO Member Institution/ Regional Health Authority	Working to Increase Public Health Capacity	
	Yes	Not at this Time
Vancouver Coastal Health Authority	✓	
Provincial Health Services Authority	✓	
Capital Health Authority (Edmonton)	✓	
Saskatoon Health Region	✓	
London Health Sciences Centre	✓	
Sunnybrook & Women's College Health Sciences Centre		✓
University Health Network		✓
St. Joseph's Healthcare (Hamilton)	✓	
SCO Health Service (Ottawa)	✓	
Children's Hospital of Eastern Ontario	✓	
Capital District Health Authority (Halifax)	✓	
IWK Health Centre	✓	
Eastern Regional Integrated Health Authority	✓	

PUBLIC HEALTH RESEARCH

Research is the oxygen of an evidenced-based health system, and as such, is essential to the development of effective response measures and ultimate control of public health epidemics.

Research is the oxygen of an evidence-based health system, and as such, is essential to the development of effective response measures and ultimate control of public health epidemics. At this point, with few notable exceptions, Canadian governments and public health institutions have not built the necessary research capacity for both emerging infectious and long-term chronic diseases. Research and evaluative capacity in public health more generally was not sustained during the budget roll-backs of the 1990s, as deficit-cutting reductions limited federal transfers.[xiv]

While research funding has significantly increased across Canada in recent years, investments have favoured investigator-initiated fundamental research or R&D activities that are amenable to short-term economic pay-offs through private partnerships. The National Advisory Committee on SARS and Public Health strongly supported "ongoing and greater investments in 'curiosity-driven' research."[xv]

Other recommendations of the Naylor committee to build research capacity include: (1) Earmarking substantial funding to augment national capacity for research into epidemiologic and laboratory aspects of emerging infectious diseases and other threats to population health; (2) Investments in provincial, territorial, and regional public health science capacity; (3) Development of clear protocols for leadership and coordination of future epidemic research responses; and (4) Establishment of a task force on emerging infectious diseases to recommend research priorities and funding mechanisms to granting agencies such as the CIHR.

ACAHO asked members to identify new research projects underway which have a particular focus on infection control and emergency preparedness, as well as the broader public health mandate.

The **BC Centre for Disease Control** focuses on research projects which speak to a major public health issue, the control and elimination of sexually transmitted infections and HIV/AIDS. Examples of research range from the SARS Accelerated Vaccine Initiative to surveys on Knowledge Attitudes and Beliefs around health seeking behaviours such as immunization. The majority of the Centre's efforts are focused on surveillance in order to monitor trends of sexually transmitted infections and HIV in the province, to quickly define new or emerging trends in diseases.

The **BC Centre for Disease Control** has partnered with Health Canada and the University of British Columbia, the University of Victoria, and the University of Washington to carry out a Border Air Quality Studies project. The Centre is involved in many other public health research projects including:

- Epidemiology and Food Protection Services are leading the public health representation in revising a provincial plan to identify the critical role of public health interventions in foreign animal disease incidents such as the avian flu outbreak in BC poultry flocks;

- An update to the national guidelines for controlling radon gas in homes and public buildings (in partnership with Health Canada and other provinces and territories);
- A study to assess the microwave radiation levels around cellular telephone transmitters in 22 residential communities in BC; and
- A study to evaluate patient doses during x-ray procedures where new digital imaging systems are employed.

At Capital Health (Edmonton), staff are involved on an ongoing basis in public health research.

Finally, the **BC Centre for Disease Control** is leading a Federal/Provincial/Territorial Working Group responsible for developing public information resources on the health effects of electro-magnetic fields from power lines.

Vancouver Coastal Health Authority has received a CIHR grant to review the effectiveness of on-line infection control training modules. At **Capital Health (Edmonton),** staff are involved on an ongoing basis in public health research including clinical trials in vaccines and anti-viral agents, the impact of environmental pollution on human health, enhanced surveillance initiatives for communicable diseases and the impact of health policy on public health status.

The Saskatoon Health Region has submitted several papers for publication, based on work research staff have undertaken in the areas of health disparities and infectious disease epidemiology.

Over the last two years, **Saskatoon Health Region** has hired a manager of population health who is a PhD candidate, and a medical epidemiologist with a PhD in epidemiology as a shared position with the University of Saskatchewan. The Region has also advertised and interviewed for a deputy medical health officer as a shared position with the University. Together with the existing population health research staff, the **Saskatoon Health Region** has submitted over a dozen major research proposals in the past year, varying from several hundred thousand dollars to several million dollars in size. For example, the Region received funding for a research project examining the health effects of the public smoking ban in Saskatoon. The Region has since been asked to repeat this study at the provincial level for the Saskatchewan Cancer Society.

St. Joseph's Healthcare is collaborating with stakeholders across Canada, as well as with the Centre for Disease Control in Atlanta, Georgia, the University of Hong Kong, the World Health Organization and the private sector on infection control.

The **Saskatoon Health Region** has submitted several papers for publication, based on work research staff have undertaken in the areas of health disparities and infectious disease epidemiology. The Region has presented results of these studies, as well as some program effectiveness work at several national and international foras.

St. Joseph's Healthcare (Hamilton) has many public health research projects underway. **St. Joseph's Healthcare (Hamilton)** is collaborating with stakeholders across Canada, as well as with the Centre for Disease Control in Atlanta, Georgia, the University of Hong Kong, the World Health Organization in Geneva and the private sector on infection control research including:

- Pandemic Respiratory Virus Preparedness
- SARS and SARS Vaccine
- Avian Flu
- West Nile Virus
- Methicillin resistance *Staphylococcus aureus* (MRSA)
- Vancomycin resistance Enterococcus (VRE)
- The role of *C. pneumoniae* in atherosclerosis
- Clinical evaluations of anti-retroviral drugs

- Pneumococcal vaccine evaluation in HIV patients

The Firestone Institute for Respiratory Health at **St. Joseph's Healthcare** (McMaster University) continues to conduct analysis of national databases from Canada and abroad to link respiratory disease-related hospital admissions to specific viral triggers. The Centre for Evaluation of Medicines (**St. Joseph's Healthcare)** is extensively involved in projects designed to evaluate the impact of medications and health technologies, with a particular focus on 'real world' environments.

Figure 3: ACAHO Members Conducting Public Health Research[xvi]

ACAHO Member Institution/ Regional Health Authority	Conducting Public Health Research	
	Yes	Not at this Time
Vancouver Coastal Health Authority	✓	
Provincial Health Services Authority	✓	
Capital Health Authority (Edmonton)	✓	
Saskatoon Health Region	✓	
London Health Sciences Centre	✓	
Sunnybrook & Women's College Health Sciences Centre		✓
University Health Network	✓	
St. Joseph's Healthcare (Hamilton)	✓	
SCO Health Service (Ottawa)	✓	
Children's Hospital of Eastern Ontario	✓	
Capital District Health Authority (Halifax)	✓	
IWK Health Centre	✓	
Eastern Regional Integrated Health Authority	✓	

At SCO Health Services, research focuses developing a decision aid tool for hospital employees with respect to a relatively stable annual vaccination rate.

With respect to drug utilization and prescribing practices, **St. Joseph's Healthcare (Hamilton)** is investigating better solutions for senior citizens in order to avoid unforeseen drug interactions and multiple side effects. Further on the pharmaceutical front, **St. Joseph's Healthcare (Hamilton)** is conducting research to evaluate the outcomes of government pharmaceutical formulary decisions as well as evaluating new health technologies in 'real' Ontario settings.

St. Joseph's Healthcare (Hamilton) continues to investigate informatics and therapeutics (electronic medical records, web-based disease and therapy tracking devices, etc.) and their potential to enhance access, quality, efficiency, privacy and integration.

University Health Network reports that several tuberculosis-related projects are currently underway which examine the care of tuberculosis patients in the province of Ontario. Other studies are examining the role of antiviral medications in an influenza pandemic.

At **SCO Health Services,** research focuses on staff reticence towards vaccinations and developing a decision aid tool for employees with respect to a relatively stable annual vaccination rate.

At **Eastern Regional Integrated Health Authority**, researchers are examining the impact of the Healthy Beginnings program, which targets infants and parents of families where there is deemed to be some degree of risk related to various determinants of health. The Health Authority is also involved in needs assessment research.

NEW PUBLIC HEALTH INITIATIVES

Many new and innovative public health initiatives originate in teaching hospitals and Regional Health Authorities across the country. From infection control to emergency preparedness, ACAHO members have invested both time and money to ramp up public health programs in their institutions or Regional Health Authorities.

Many new and innovative public health initiatives originate in Teaching Hospitals and Regional Health Authorities across the country, where the next generation of health professionals are trained and world class, leading-edge research and the delivery of specialized health services takes place.

ACAHO members were asked to provide examples of how their institutions or Regions were addressing Infection Control and Emergency Preparedness in light of recommendations emanating from the Naylor report.

From infection control to emergency preparedness, ACAHO members have invested both time and financial resources to ramp up public health programs in their institutions or Regional Health Authorities.

Infection Control

The Naylor report observed that nearly 80% of Canadian hospitals do not meet the standard recommended by the Canadian Infection Control Alliance of one infection control practitioner per 175 beds.

Infection control programs were among the first to be reviewed in light of the SARS outbreak. Infection control programs in hospitals function as a parallel system to public health efforts in the community. Infection control practitioners are responsible for tracking and managing hospital-acquired infections, educating other health care workers, and reinforcing proper precautions.[xvii] According the Canadian Hospital Epidemiology Committee, systematic problems in our current health care system include "insufficient time devoted to learning infection control practices for all health care providers" and "little, if any, monitoring of infection control practices and few consequences for non-compliance."[xviii]

The Naylor report observed that nearly 80% of Canadian hospitals do not meet the standard recommended by the Canadian Infection Control Alliance of one infection control practitioner per 175 beds. Further, fewer than 40% of hospitals have an infection control director with advanced qualifications (an MD or PhD) in infectious diseases, medical microbiology, or infection control. The Advisory Committee specifically raised for discussion whether Canada needs to establish higher national standards for infection control within hospitals and whether provinces should be initiating and funding a major overhaul of hospital infection capacity.

As a result of the National Advisory Committee's recommendations, **Vancouver Coastal Health Authority (VCH)** undertook a review of infection control in all of their affiliated hospitals, and as a result, invested $1 million in new infection control staff. Further, they developed a Health Authority-wide hospital infection control program which introduced a computer training model for infection control which is readily available for all staff, including housekeeping employees. Beyond the acute care centres, **Vancouver Coastal Health Authority** hired infection control specialists to work in community facilities, including two new epidemiologists.

The **BC Centre for Disease Control (BCCDC)** has launched several initiatives to link public health, facility infection control and occupational health including the design and execution of a University level course focused on providing infection control practitioners with insights into epidemiology and public health.

Capital Health (Edmonton) has created a regional infection control program to coordinate infection control across all sites and sectors. As well, **Capital Health (Edmonton)** has made an additional investment of approximately $400,000 in infection control initiatives over the course of the past year.

London Health Sciences Centre recently established quarterly meetings of the citywide hospitals infection control professionals and the local Public Health Unit in order to increase communication and develop partnerships in areas of common concern. The Infection Control Team Leader is also a member of the Provincial Infection Control Advisory Committee (PIDAC) and is assisting in the development of core competencies in Infection Control for all provincial health workers.

The Infection Prevention and Control Subcommittee of the Provincial Infectious Diseases Advisory Committee in Ontario is currently being chaired by a representative of Sunnybrook & Women's College Health Sciences Centre.

The Infection Prevention and Control Subcommittee of the Provincial Infectious Diseases Advisory Committee in Ontario is currently being chaired by a representative of **Sunnybrook & Women's College Health Sciences Centre.** The Committee is actively developing best practice guidelines for Infection Prevention and Control for Ontario.

Post-SARS, **St. Joseph's Healthcare (Hamilton)** has participated on a city-wide Regional Outbreak Committee. This is a sub-committee of the Hamilton Infection Prevention and Control Committee. Membership on the Outbreak Committee comes from all community sectors including acute care, long term care, public health, Ministry of Health-Long Term Care (Ontario), Continuing Care Access Centres, community physicians, and infection diseases. The **SCO Health Service** in Ottawa reports a new infection control program is under development at this time.

Figure 4 provides an overview of the status of infection controls programs currently in place.

Figure 4: ACAHO Members with Infection Control Programs in Place[xix]

ACAHO Member Institution/ Regional Health Authority	Infection Control Program Currently in Place	
	Yes	Not at this Time
Vancouver Coastal Health Authority	✓	
Provincial Health Services Authority	✓	
Capital Health Authority (Edmonton)		✓
Saskatoon Health Region		✓
London Health Sciences Centre	✓	
Sunnybrook & Women's College Health Sciences Centre	✓	
University Health Network	✓	
St. Joseph's Healthcare (Hamilton)	✓	
SCO Health Service (Ottawa)	✓	
Children's Hospital of Eastern Ontario		✓
Capital District Health Authority (Halifax)		✓
IWK Health Centre		✓
Eastern Regional Integrated Health Authority		✓

Emergency Preparedness

The SARS outbreak clearly demonstrated that more work is needed to integrate the public health and emergency response systems in times of crisis. Federal/Provincial/ Territorial (F/P/T) collaboration in emergency preparedness and response is more advanced than in health surveillance and outbreak management.[xx] Since March 2002, an F/P/T Network for Emergency Preparedness and Response has been working on issues such as leadership and coordination; surge capacity; training and education; surveillance and detection infrastructure (including laboratories); supplies; and communications.

The Naylor Committee articulated an urgent need for "multi-jurisdictional planning to create integrated protocols for outbreak management", followed by "training exercises to test the protocols and assure a high degree of preparedness to manage outbreaks."

The Naylor Committee articulated an urgent need for "multi-jurisdictional planning to create integrated protocols for outbreak management", followed by "training exercises to test the protocols and assure a high degree of preparedness to manage outbreaks." To create surge capacity, the F/P/T Network for Emergency Preparedness and Response has already been working towards establishment of Health Emergency Response Teams (HERT). The HERT model has been developed as a multidisciplinary group of clinical and support personnel for "all hazards".

The SARS experience highlighted the need to mobilize selected groups of skilled personnel into epidemic response teams within the HERT framework. To accelerate collaborative activities in infectious disease surveillance and outbreak management, the Naylor Committee further recommended the creation of a new F/P/T Network for Communicable Disease Control. This new F/P/T network would reinforce the collaborative activities of the F/P/T Network for Emergency Preparedness and Response.[xxi]

The **BC Centre for Disease Control** provides provincial representation on the Federal/ Provincial/Territorial Coordinating Committee for Nuclear & Radiological Emergency Management. This is in addition to participation in a Health Canada proposal to establish a national network of radiological monitoring laboratories for emergency response support.

Both the Vancouver Coastal Health Authority and Capital Health (Edmonton) have worked to increase emergency preparedness and management capacity throughout the entire Health Authority.

Both the **Vancouver Coastal Health Authority** and **Capital Health (Edmonton)** have worked to increase emergency preparedness and management capacity throughout the entire Health Authority. **Vancouver Coastal Health Authority** now has seven dedicated staff working on emergency preparedness and have established Emergency Operation Centres in each of the areas of the Health Authority with complete communication packages. In addition, they have containerized their four emergency hospitals and have four mobile decontamination units strategically placed throughout the Authority. **Capital Health (Edmonton)** has allocated $250,000 of the annual global budget to emergency preparedness and increasing management capacity.

St. Joseph's Healthcare (Hamilton) hired external consultants to review the organization's state of readiness for all emergency situations.

Sunnybrook & Women's College Health Sciences Centre's *Pandemic Influenza Plan* was named a Leading Practice by the Canadian Council of Health Services Accreditation. Leading practices illustrate innovation and creativity, as identified by the CCHSA survey team. Leading practices are notable for what they contribute to the field as opposed to the organization. **Sunnybrook & Women's College Health**

Science Centre's *Pandemic Influenza Plan* takes into account the priority operational processes that will need to continue, including access to clinical resources, capacity building and appropriate development of human resources.

The province of Newfoundland has recently established an Emergency Management Committee to oversee provincial health emergency preparedness. Senior Management at **Eastern Regional Integrated Health Authority** is participating on this committee. Senior Management is also reviewing a Terms of Reference for a Regional All Hazards Emergency Preparedness Planning Committee.

Figure 3 provides an overview of the status of ACAHO members with coordinated emergency response systems in place.

Figure 5: ACAHO Members with Coordinated Emergency Response System in Place[xxii]

ACAHO Member Institution/ Regional Health Authority	Coordinated Emergency Response System in Place	
	Yes	Not at this Time
Vancouver Coastal Health Authority	✓	
Provincial Health Services Authority	✓	
Capital Health (Edmonton)	✓	
Saskatoon Health Region		✓
London Health Sciences Centre		✓
Sunnybrook & Women's College Health Sciences Centre	✓	
University Health Network		✓
St. Joseph's Healthcare (Hamilton)	✓	
SCO Health Service (Ottawa)		✓
Children's Hospital of Eastern Ontario		✓
Capital District Health Authority (Halifax)		✓
IWK Health Centre		✓
Eastern Regional Integrated Health Authority	✓	

BUILDING PUBLIC HEALTH NETWORKS

Networks come in many shapes and sizes, with mandates that vary from collaboration and coordination to oversight and joint policy development.

In 2004, the Working Group "A Public Health Agency for Canada" recognized the merit in establishing a Pan-Canadian Public Health Network which knit together the infectious disease network and other intergovernmental processes discussed in the Naylor Report. Improved processes would develop as well as a series of formal agreements that would specify the rules of engagement on specific public health issues.

Networks come in many shapes and sizes, with mandates that vary from collaboration and coordination to oversight and joint policy development. *ACAHO asked members whether in the post-SARS environment, their institution or Health Authority had taken action to develop new public health programs or to create public health networks.* The public health networks which have been established by members of ACAHO focus on all of the above in addition to:

- Seeking to identify consensus-based priorities;
- Helping to define and clarify jurisdictional roles and responsibilities with respect to public health;
- Reducing duplication between and among jurisdictions;
- Overseeing a process for developing, approving and implementing common standards, guidelines and sharing of best practices;
- Promoting and overseeing a process of applied research and its translation into policies, programs and practice; and
- Over time, seeking to build new cooperative and collaborative mechanisms and approaches to public health matters.

Prior to the SARS outbreak, the **BC Centre for Disease Control (BCCDC)** was active networking and linking with a variety of public health programs. Post-SARS, the **BCCDC** was involved in the creation of the Provincial Infection Control Network (PIC Network). This Network was announced by the BC Ministry of Health in January 2005 and is led by the **Provincial Health Services Authority**, partnering with **Vancouver Coastal Health Authority.** The purpose is to provide coordination of strategic advice on infection control across the continuum of care. Coordination of advice was recognized as an important gap post-SARS. The Network includes a multidisciplinary team of experts such as Infection Control Practitioners, Medical Microbiology/ Infection Control Officers, Epidemiologists and Medical Health Officers. This network has been recognized across Canada for its recent successes.

The **BC Centre for Disease Control** has a number of other Public Health Networks established including:

- Scientific Networks;
- National Network of Radiological Monitoring Laboratories;
- STD/AIDS Network;
- Canadian Public Health Lab Network (CPHLN);
- Canada-wide network for practitioners, policy makers and researchers in environmental health; and
- The BC Environmental and Occupational Health Research Network.

Capital Health (Edmonton) has worked with other public health units across the country to create a national network of the eighteen largest public health departments in the country, called the Urban Public Health Network. To date, the network has held three national meetings to develop coordinated public health initiatives, share best practices and discuss emergency preparedness. In 2006, the group will be reconvening to discuss an applied public health research agenda and the potential of forming a series of networked Public Health Observatories in Canada, similar to the group structured in the United Kingdom. The **Saskatoon Health Region** is also a member of this Urban Public Health Network.

The **London Health Sciences Centre** in collaboration with the Regional Infection Control Steering Committee has made a submission to the Ministry of Health and Long Term Care in Ontario for funding to assist in the development of a Regional Network proposal, due April 2006.

The **University Health Network** has participated in the development of regional infection control networks by assisting the North East Local Health Integration Network (LHIN) submit its application. The **University Health Network** is now looking to provide infection control consultation services to this group of hospitals in Ontario. They are also taking the lead, pulling together the Toronto Academic Health Science Network (TAHSN) hospitals to develop a common pandemic influenza plan.

In Newfoundland, restructuring has created a larger region with broad responsibilities across the continuum of health. As a result, the **Eastern Regional Integrated Health Authority** is looking to establish a Public Health Network to keep various players across the region engaged and current.

Figure 6: ACAHO Members Participating in Public Health Networks

ACAHO Member Institution/ Regional Health Authority	Participation in Public Health Networks?	
	Yes	Not at this Time
Vancouver Coastal Health Authority	✓	
Provincial Health Services Authority	✓	
Capital Health (Edmonton)	✓	
Saskatoon Health Region	✓	
London Health Sciences Centre	✓	
Sunnybrook & Women's College Health Sciences Centre		✓
University Health Network	✓	
St. Joseph's Healthcare (Hamilton)		✓
SCO Health Service (Ottawa)		✓
Children's Hospital of Eastern Ontario		✓
Capital District Health Authority (Halifax)		✓
IWK Health Centre		✓
Eastern Regional Integrated Health Authority	✓	

HEALTH GOALS FOR CANADA

In the context of accelerating work on a pan-Canadian Public Health Strategy, in September 2004, the First Ministers committed to "improving the health status of Canadians through a collaborative process." First Ministers directed Provincial Ministers of Health to take the lead on developing health goals for Canada. Federal Minister Carolyn Bennett, Minister of State (Public Health), and Manitoba Minister Theresa Oswald, Minister Responsible for Healthy Living, were chosen to lead this process.

In the context of accelerating work on a pan-Canadian Public Health Strategy, in September 2004, the First Ministers committed to "improving the health status of Canadians through a collaborative process".

Understanding that improving the health of Canadians will require the participation and collaboration of individuals, groups, organizations and employers, the consultation phase of the goals initiative included roundtables with public health stakeholders, experts and ordinary citizens in each province and territory so that Canadians could share their concerns, priorities and visions for a healthy Canada. Shortly after the roundtables concluded, an overarching goal and nine health goals were drafted.[xxiii]

The goals statements are broad and meant to express the collective hopes and expectations of Canadians when it comes to their health. The goals are intended to be guideposts indicating a path to improve the health and quality of life of Canadians rather than a detailed map that lays out exactly how to get there.[xxiv]

Two thirds of ACAHO members surveyed were familiar with "Health Goals for Canada".

ACAHO asked members whether or not they were familiar with "Health Goals for Canada" and if so, what they were doing to support the initiative. Two thirds of ACAHO members surveyed were in fact familiar with "Health Goals for Canada". **BC Centre for Disease Control** indicated that they are increasingly linking research on infectious diseases to other basic determinants of health. The Centre has a strong emphasis on "population health" based health promotion and prevention, planning and programming. **Provincial Health Services Authority**, including staff from **BC Centre for Disease Control** participated in several of the Provincial Roundtable discussions on Public Health Goals.

Both Vancouver Coastal Health and Saskatoon Health Region participated in the Provincial Roundtable Discussions concerning Public Health Goals for Canada.

At the **Vancouver Coastal Health Authority**, a Regional Manager for Health Promotion and Population Health is being recruited. Meanwhile, the Chief Medical Health Officer in the **Saskatoon Health Region** is a member of the National Reference Group for Health Goals. The **Saskatoon Health Region** submitted feedback to the working group seeking input on the Health Goals over the Summer of 2005, based on the input of a community advisory network, senior leadership staff and public health staff. The Region is currently considering an exercise to map the Public Health Services Department's goals with the National Goals, and to further, set regional targets. Other Health Regions in the province are being encouraged to participate in this exercise in order to provide the provincial Department of Health recommendations on provincial targets and objectives to match the national goals. Both **Vancouver Coastal Health Authority** and **Saskatoon Health Region** participated in the Provincial Roundtable Discussions concerning Public Health Goals for Canada.

St. Joseph's Healthcare (Hamilton) embraces priorities which support seeing every person as healthy as they can be - physically, mentally, emotionally and spiritually. This is the overarching goal of the Health Goals. **St. Joseph's Healthcare (Hamilton)**

Eastern Regional Integrated Health Authority has incorporated population health concepts into their newly developed regional strategic planning process.

has been working towards a better understanding of emotional and spiritual wellbeing through their Brain Body Institute. They also remain an active proponent of disease prevention and public education.

Eastern Regional Integrated Health Authority has incorporated population health concepts into their newly developed regional strategic planning process. Several members of **Eastern Regional Integrated Health Authority's** senior staff participated in the Roundtable discussions in Newfoundland.

Figure 7: ACAHO Members Participating in Health Goals for Canada[xxv]

ACAHO Member Institution/ Regional Health Authority	Participating in Health Goals for Canada	
	Yes	Not at this Time
Vancouver Coastal Health Authority	✓	
Provincial Health Services Authority	✓	
Capital Health Authority (Edmonton)		✓
Saskatoon Health Region	✓	
London Health Sciences Centre		✓
Sunnybrook & Women's College Health Sciences Centre		✓
University Health Network		✓
St. Joseph's Healthcare (Hamilton)	✓	
SCO Health Service (Ottawa)		✓
Children's Hospital of Eastern Ontario		✓
Capital District Health Authority (Halifax)		✓
IWK Health Centre		✓
Eastern Regional Integrated Health Authority	✓	

Progress towards meeting and achieving the health goals as defined by the results of the consultation phase (the Roundtables) will take place at many levels. Individuals, communities, regions and governments all have a role to play, however, each will contribute different perspectives and arrive with different priorities. Ultimately each government, region, community and individual will be responsible for putting the goal statements into effect in meaningful and relevant ways.

CONCLUSION

In many tangible ways, members of ACAHO from coast to coast have developed and implemented a series of public health measures which serve to improve the responsiveness and effectiveness of the health system in general—which Canadians being the ultimate beneficiary.

In Canada, the public health system is widely understood as the system responsible for helping to protect Canadians from injury and disease—both infectious and chronic, and for helping them stay healthy. Public health has been described as the science and art of promoting health, preventing disease, prolonging life and improving quality of life through organized efforts.[xxvi]

While the academic mission of ACAHO members does not include public health explicitly, it is clear that Teaching Hospitals and Regional Health Authorities are investing both human and financial resources to further health prevention and promotion strategies within their affiliated institutions or Regional Health Authorities. Although the acute care sector must interact with, and complement the public health system (and vice versa), it is important to recognize that these two systems are part of a larger system still—the Canadian health care system—which works to preserve and promote the health of all Canadians.

In many tangible ways, members of ACAHO from coast to coast have developed and implemented a series of public health measures which will serve to improve the responsiveness and effectiveness of the health system in general - with Canadians being the ultimate beneficiary. At the same time, the explicit processes and programs which have been developed to improve infection control and emergency preparedness across the country serve to improve the transparency of decision making processes in times of crisis, and clarify many of the accountability relationships when it comes to public health emergency planning.

While there is no doubt that significant progress has been achieved in the short time since the Naylor Report, there is clearly more work that needs to be done in this area. Given their role in the health system, Teaching Hospitals and Regional Health Authorities look forward to contributing to a responsive public health system.

APPENDIX A: HEALTH GOALS FOR CANADA
A FEDERAL/PROVINCIAL/TERRITORIAL COMMITMENT TO CANADIANS

OVERARCHING GOAL

As a nation, we aspire to a Canada in which every person is as healthy as they can be—physically, mentally, emotionally, and spiritually.

HEALTH GOALS FOR CANADA

Canada is a country where:

Basic Needs (Social and Physical Environments)
Our children reach their full potential, growing up happy, healthy, confident and secure.

The air we breathe, the water we drink, the food we eat, and the places we live, work and play are safe and healthy—now and for generations to come.

Belonging and Engagement
Each and every person has dignity, a sense of belonging, and contributes to supportive families, friendships and diverse communities.

We keep learning throughout our lives through formal and informal education, relationships with others and the land.

We participate in and influence the decisions that affect our personal and collective health and well-being.

We work to make the world a healthy place for all people, through leadership, collaboration and knowledge.

Healthy Living
Every person receives the support and information they need to make healthy choices.

A System for Health
We work to prevent and are prepared to respond to threats to our health and safety through coordinated efforts across the country and around the world.

A strong system for health and social well-being responds to disparities in health status and offers timely, appropriate care.

APPENDIX B:
ACAHO CONTACT LIST FOR PUBLIC HEALTH INITIATIVES

Provincial Health Services Authority **BC Centre for Disease Control** Ms. Sharon de Lisser Manager, Administration BC Centre for Disease Control 655 West 12th Ave Vancouver, BC V5Z 4R4	 Tel: (604) 660-2040 Fax: (604) 660-6066 sharon.delisser@bccdc.ca
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Capital Health (Edmonton) Dr. Gerry Predy Vice President Public Health Medical Officer of Health Capital Health Authority Suite 300, 10216-124 Street Edmonton, Alta T5N 4A3	 Tel: (780) 413-7900 Fax: (780) 413-7950 gpredy@cha.ab.ca
Saskatoon Health Region Dr. Cory Neudorf Chief Medical Health Officer Vice-President of Research Saskatoon Health Region c/o Public Health Services 101-310 Idylwyld Drive, North Saskatoon, Saskatchewan S7L 0Z2	 Tel: (306) 655-4338 Fax: (306) 655-4414 cory.neudorf@saskatoonhealthregion.ca

London Health Sciences Centre Ms. Mary Lou Card City-Wide Infection Control Team Leader London Health Sciences Centre 800 Commissioner's Road East London, ON N6A 4G5	Tel: (519) 685-8500 ext 57411 marylou.card@lhsc.on.ca
St. Joseph's Healthcare (Hamilton) Mr. Derek McNally Administrative Director, Clinical Programs St. Joseph's Healthcare Hamilton 50 Charlton Ave East Hamilton, ON L8N 4A6	Tel: (905) 522-1155 ext 3852 Fax: (905) 521-6139 dmcnally@stjosham.on.ca
Sunnybrook & Women's College Health Sciences Centre Dr. Peeter Poldre VP, Education & Medical Affairs Sunnybrook & Women's College Health Sciences Centre 2075 Bayview Avenue Suite A333 Toronto, ON M4N 3M5	Tel: (416) 480-4504 peeter.poldre@sw.ca
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Children's Hospital of Eastern Ontario Mr. Garry Cardiff President & CEO Children's Hospital of Eastern Ontario 401 Smyth Road Ottawa, ON K1H 8L1	Tel: (613) 737-2201 Fax: (613) 738-4801 cardiff@cheo.on.ca
Capital District Health Authority Mr. Don Ford President & CEO Suite 2142, 1796 Summer Street Halifax, NS B3H 3A7	Tel: (902) 473-2058 Fax: (902) 473-3368 don.ford@cdha.nshealth.ca
IWK Health Centre Ms. Anne McGuire President & CEO IWK Health Centre 5850 University Avenue P.O. Box 9700 Halifax, NS B3K 6R8	Tel: (902) 470-6629 Fax: (902) 492-1446 anne.mcguire@iwk.nshealth.ca
Eastern Regional Integrated Health Authority Ms. Beverly Clarke Chief Operating Officer Eastern Regional Integrated Health Authority Waterford Bridge Road St. John's, Nfld. A1E 4J8	Tel: (709) 777-1300 beverleyclarke@hcssjr.nf.ca

END NOTES

[i] Learning from SARS: Renewal of Public Health in Canada. Health Canada. A Report of the National Advisory Committee on SARS and Public Health. October 2003. Chapter 10: p 183.
[ii] See Appendix A for list of Health Goals for Canada.
[iii] *Learning from SARS-Renewal of Public Health in Canada*. A Report of the National Advisory Committee on SARS and Public Health. Health Canada. October 2003.
[iv] This position, Minister of State, Public Health, has since been eliminated in Cabinet.
[v] *Beyond the Naylor Gap: Public Health and Productivity*. Brief to the **House of Commons** Standing Committee on Finance. Canadian Coalition for Public Health in the 21st Century. October 24, 2005.
[vi] *National Health Expenditure Database, 2005*. Canadian Institute of Health Information, 2005.
[vii] The Budget Plan 2006. Available online at www.fin.gc.ca
[viii] The Public Health Agency of Canada is scheduled to receive $367 over five years of the $1 billion announced for pandemic preparedness in the 2006 Federal Budget.
[ix] An additional $700 million on top of the original federal funding level of $500 million annually.
[x] Final Report of the Federal/Provincial/Territorial Special Task Force on Public Health. 2001. Available online at http://www.phac-aspc.gc.ca/publicat/healthpartners/index.html
[xi] Romanow, Roy. Building on Values: the Future of Health Care in Canada. 2002. Available online at: http://www.hc-sc.gc.ca/english/care/romanow/hcc0086.html
[xii] Kirby, Michael. The Health of Canadians—the Federal Role. Standing Senate Committee on Social Affairs, Science and Technology. 2002. Available online at: http://www.parl.gc.ca/37/2/parlbus/commbus/senate/com-e/soci-e/rep-e/repoct02vol6-e.htm
[xiii] According to survey responses.
[xiv] Learning from SARS: Renewal of Public Health in Canada. Health Canada. A Report of the National Advisory Committee on SARS and Public Health. October 2003. Chapter 10: p 183.
[xv] Learning from SARS: Renewal of Public Health in Canada. Health Canada. A Report of the National Advisory Committee on SARS and Public Health. October 2003. Chapter 10: p 191.
[xvi] According to survey responses
[xvii] *Learning from SARS: Renewal of Public Health in Canada. Health Canada*. A Report of the National Advisory Committee on SARS and Public Health. October 2003.
[xviii] Available online at http://www.ammi.ca/the_society/chec.php
[xix] According to survey responses.
[xx] *Learning from SARS: Renewal of Public Health in Canada*. Health Canada. A Report of the National Advisory Committee on SARS and Public Health. October 2003
[xxi] *Learning from SARS: Renewal of Public Health in Canada*. Health Canada. A Report of the National Advisory Committee on SARS and Public Health. October 2003.
[xxii] According to survey responses.
[xxiii] See Appendix A for list of Health Goals for Canada.
[xxiv] *Health Goals for Canada. A Federal, Provincial and Territorial Commitment to Canadians*. www.healthycanadians.ca
[xxv] According to survey responses
[xxvi] Definition of *Public Health* as provided by the Canadian Public Health Association.